

Kits and Methods For Improving Batting Performance

RELATED APPLICATIONS

This application is related to and claims priority to Kreusser et al., United States Provisional Patent Application Ser. No. 60/464,915, filed April 23, 2003, which application is herein incorporated by reference in its entirety.

BACKGROUND

The invention relates to the field of baseball and related batting sports, and improving one or more of a batsperson's strength, conditioning, and hand-eye coordination.

The invention builds on the concept of the wildly successful Hit-A-Way™ device described and claimed in US Patents 6,296,582 and 6,514,161, each of which patents is herein incorporated by reference in its entirety including all drawings. The Hit-A-Way™ device enables a user to practice repetitively striking a practice ball locatable on a tether to one of a plurality of vertically preset locations resulting in a realistic resistance and flight of a struck ball and a quick controlled return of the object to the same location for re-striking. The distance of the practice ball from the user and the ground is adjustable by adaptation of the pole structure used to mount the ball tether or by adjustment of the mounting of the ball on the tether or the tether length.

The present invention combines the merits of the Hit-A-Away™ system with another component that promises to enhance the Hit-A-Way™ 's utility and commercial success, as well as the batting prowess of those using it.

SUMMARY OF THE INVENTION

The Hit-A-Way™ device, because it functions with a maximum controlled radius or distance from the post, is safe to the batter who is typically positioned at a radius or distance further than that maximum. The invention takes advantage of this and features methods and kits using/having a Hit-A-Way™ or similar device and a weighted component for attachment to the bat used. The weighted component may be any shape, but is typically annular and of a durable material that can withstand the forceful hitting

with a bat. Weighted components, although traditionally used preceding live hitting, traditionally have not been used in conjunction with the direct contact of a ball because the weighted component, especially if external, would result in unpredictable deflections endangering both the batter and bystanders.

The Hit-A-Way™ device design overcomes such danger, conveniently allowing for integration of durable weighted bat components into the Hit-A-Way™ system. The applicant has found that the integration of such a component surprisingly and dramatically improves not only the strength and conditioning of the user, but also that user's prowess and satisfaction with the Hit-A-Way™ system. The weighted component can be used with the Hit-A-Way™ system in multiple repetitions, then removed, and the system then used without it.

In one aspect, the invention features a kit for improving batting performance, comprising:

a ball hitting practice device for use in combination with a substantially upright member comprising a ball hitting practice device. The device includes a ball slideably mounted upon a tether, which has an attachment end and a distal end. The attachment end has a first tether end and a second tether end for engaging the substantially upright member. There is also a positioner mounted upon the tether proximate to the distal end of the tether. This provides a stop for said slidably mounted ball upon said tether, and also permits the determining of targeting position for the ball. When the ball is struck by a user it wraps around substantially upright member and returns in the opposite direction upon complete winding, and allowing for a new round of hitting. The kit further comprises a weighted component for attachment to and weighting of a bat such that when the weighted bat is used in conjunction with the ball hitting device, the user receives conditioning and training for later play without the weighted component. The kit can optionally be marketed with a bat that can receive or be adapted to receive the weighted component. In broader embodiments, the kits of the invention feature simply a tethered ball for connection to a post and a weighted component for use with a bat. Variations on this aspect are found in the claims, below.

The invention also features conditioning and training methods that make use of such components.

In some embodiments, the ball is a baseball. In other embodiments, it is a softball. In still other embodiments, each type of ball is supplied in the kit.

In some embodiments, there are multiple weighted components, each of which may be of the same size and weight, or else of different size and/or weight. Regardless, such components are adapted to conveniently engage and disengage from standard bats.

In another embodiment, the kit further contains written and/or video instructions for use.

In yet a further embodiment, the kit also comes with a carrying bag or device adapted or designed to carry one or more of said kit components. The device can be hard, e.g., made of wood or plastic, or else soft, e.g., made of cloth.

In other aspects, the invention makes use of different brands of devices and different device designs. For example, the weighted components of the invention can also be used in conjunction with devices described in

Further embodiments will be apparent to the person of ordinary skill in the art from the drawings, detailed specification, and claims to follow.

BRIEF DESCRIPTION OF DRAWING FIGURES

Figure 1 shows (A) a top view of a “donut” and (B) the donut in combination with a bat.

Figure 2 shows the combination of a “donuted” bat and a Hit-A-Way™ device embodiment (the latter of which is borrowed from Figure 8 of US Patents 6,296,582 and 6,514,161).

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS OF THE INVENTION

See the detailed description in US Patents 6,296,582 and 6,514,161, herein incorporated by reference. In addition to the description reported there, the invention contemplates using a removable weighted component in conjunction with a bat.

With reference to Figures 1 and 2, a preferred embodiment incorporates what is commonly known as a donut 80, having an outside portion 80a and an inside recess portion 80b to engage the periphery of a bat 30. The donut is typically annular in

dimension and made out of a strong durable metal, plastic or rubber weighing typically between 6 and 20 troy ounces. The inside recess portion 80b should be of a greater radius than the handle portion 30a of the bat 30, but of a smaller radius than at least a portion of the contact portion 30b, such that the weighted component 80 can be slid over the handle 30a and engage the bat.

It will be understood, however, that the weighted components of the invention are not limited to the particular weights and configurations described above, and that a myriad of alternatives exist and will suffice, e.g., as described in published United States Patent Applications 20020165070 (“Sports training and conditioning device”), 20020128085 (“Swing weight”), 20020082126 (“Training sports club and method”), and 20010034276 (“Speed and power bat”), the disclosures of which are herein incorporated by reference in their entirety including all drawings. For example, the bat may also be weighted using with a lead weighted Velco® wrap as is commonly employed for wrapping around ankles and wrist when exercising. In another embodiment, the bat may contain an insert that makes it heavier. Alternatively, the end of the contact portion of the bat could be configured to accept a snap-in weight or screw-in weight component that could readily be removed.

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The foregoing discussion is not intended to be limiting of the invention and is merely representative of various aspects and embodiments. All documents cited are indicative of the levels of skill in the art to which the invention pertains. The disclosure of each document cited is incorporated by reference herein to the same extent as if each had been incorporated by reference in its entirety individually.

One skilled in the art will readily appreciate that the present invention is well adapted to carry out the objects and obtain the ends and advantages mentioned, as well as those inherent therein. The methods and kits described herein illustrate preferred embodiments, are exemplary, and are not intended as limitations on the scope of the invention. Certain modifications and other uses will occur to those skilled in the art, and are encompassed within the spirit of the invention, as defined by the scope of the claims.

It will be readily apparent to one skilled in the art that varying substitutions and modifications may be made to the invention without departing from the scope and spirit

of the invention. Thus, such additional embodiments are within the scope of the invention and the following claims.

What is claimed is: